ELEMENTS OF CHANGE

6. BEHAVIORAL THERAPY

6.1. Background

Behavioral therapy is a form of therapy rooted in the principles of behaviorism. The school of thought known as behaviorism is focused on the idea that we learn from our environment. In behavioral therapy, the goal is to reinforce desirable behaviors and eliminate unwanted or maladaptive ones. The techniques used in this type of treatment are based on the theories of classical conditioning and operant conditioning. One important thing to note about the various behavioral therapies is that unlike some other types of therapy that are rooted in insight (such as psychoanalytic and humanistic therapies), behavioral therapy is action based. Behavioral therapists are focused on using the same learning strategies that led to the formation of unwanted behaviors as well as other new behaviors. Because of this, behavioral therapy tends to be highly focused. The behavior itself is the problem, and the goal is to teach clients new behaviors to minimize or eliminate the issue. Old learning led to the development of a problem, and so the idea is that new learning can fix it.

The first use of the term behavior modification appears to have been by Edward Thorndike in 1911. His article *Provisional Laws of Acquired Behavior or Learning* makes frequent use of the term "modifying behavior". Through early research in the 1940s and the 1950s the term was used by Joseph Wolpe's research group. The experimental tradition in clinical psychology used it to refer to psycho-therapeutic techniques derived from empirical research. It has since come to refer mainly to techniques for increasing adaptive behavior through reinforcement and decreasing maladaptive behavior through extinction or punishment (with emphasis on the former). Two related terms are behavior therapy and applied behavior analysis. Emphasizing the empirical roots of behavior modification, some authors consider it to be broader in scope and to subsume the other two categories of behavior change methods. Since techniques derived from behavioral psychology tend to be the most effective in altering behavior, most practitioners consider behavior modification along with behavior therapy and applied behavior analysis to be founded in behaviorism. While behavior modification and applied behavior analysis typically uses interventions based on the same behavioral principles, many behavior
modifiers who are not applied behavior analysts tend to use packages of interventions and do not conduct functional assessments before intervening.

Possibly the first occurrence of the term "behavior therapy" was in a 1953 research project by B.F. Skinner, Ogden Lindsley, Nathan H. Azrin and Harry C. Solomon. The paper talked about operant conditioning and how it could be used to help improve the functioning of people who were diagnosed with chronic schizophrenia. Early pioneers in behavior therapy include Joseph Wolpe and Hans Eysenck.

In general, behavior therapy is seen as having three distinct points of origin: South Africa (Wolpe's group), The United States (Skinner), and the United Kingdom (Rachman and Eysenck). Each had its own distinct approach to viewing behavior problems. Eysenck in particular viewed behavior problems as an interplay between personality characteristics, environment, and behavior. Skinner's group in the United States took more of an operant conditioning focus. The operant focus created a functional approach to assessment and interventions focused on contingency management such as the token economy and behavioral activation. Skinner's student, Ogden Lindsley, is credited with forming a movement called precision teaching, which developed a particular type of graphing program called the standard celeration chart to monitor the progress of clients. Skinner became interested in the individualizing of programs for improved learning in those with or without disabilities and worked with Fred S. Keller to develop programmed instruction. Programmed instruction had some clinical success in aphasia rehabilitation. Gerald Patterson used program instruction to develop his parenting text for children with conduct problems. With age, respondent conditioning appears to slow but operant conditioning remains relatively stable. While the concept had its share of advocates and critics in the west, its introduction in the Asian setting, particularly in India in the early 1970s and its grand success were testament to the famous Indian psychologist H. Narayan Murthy's enduring commitment to the principles of Behavioral Therapy and Biofeedback.

While many behavior therapists remain staunchly committed to the basic operant and respondent paradigm, in the second half of the 20th century, many therapists coupled behavior therapy with the cognitive therapy of Aaron Beck and Albert Ellis, to form cognitive behavioral therapy. In some areas the cognitive component had an additive effect, for example, evidence suggests that cognitive interventions improve the result of social phobia treatment. But in other areas it did not enhance the treatment, which led to the pursuit of Third Generation Behavior Therapies. Third generation behavior therapy uses basic principles of operant and respondent
psychology but couples them with functional analysis and a clinical formulation/case conceptualization of verbal behavior more in line with view of the behavior analysts. Some research supports these therapies as being more effective in some cases than cognitive therapy, but overall the question is still in need of answers.

When it comes to treating specific behavioral issues, behavioral therapy can often be more effective than other approaches. Phobias, panic disorder, and obsessive-compulsive disorder are examples of problems that respond well to behavioral treatments. However, it is important to note that behavioral approaches are not always the best solution. For example, behavioral therapy is generally not the best approach when treating more serious psychological disorders such as depression and schizophrenia.

6.2. Scientific Basis, Testing, and Assessment

The behavioral approach to therapy assumes that behavior that is associated with psychological problems develops through the same processes of learning that affects the development of other behaviors. Therefore behaviorists see personality problems in the way that personality was developed. They do not look at behavior disorders as something a person has but that it reflects how learning has influenced certain people to behave in a certain way in certain situations. Understanding how the process of learning takes place comes from research that has been done on operant and classical conditioning.

Behavior therapy is based upon the principles of classical conditioning developed by Ivan Pavlov and operant conditioning developed by B.F. Skinner. Classical conditioning happens when a neutral stimulus comes right before another stimulus that triggers a reflexive response. The idea is that if the neutral stimulus and whatever other stimulus that triggers a response is paired together often enough that the neutral stimulus will produce the reflexive response. Operant conditioning has to do with rewards and punishments and how they can either strengthen or weaken certain behaviors. There has been a good deal of confusion on how these two conditionings differ and whether the various techniques of behavior therapy have any common scientific base. Contingency management programs are a direct product of research from operant conditioning. These programs have been highly successful with those suffering from panic disorders, anxiety disorders, and phobias. Systematic desensitization and exposure and response prevention both
evolved from respondent conditioning and have also received considerable research.

**Behavior Avoidance Test (BAT)** is a behavioral procedure in which the therapist measures how long the client can tolerate an anxiety-inducing stimulus. The BAT falls under the exposure-based methods of Behavior Therapy. Exposure-based methods of behavioral therapy are well suited to the treatment of phobias, which include intense and unreasonable fears (e.g., of spiders, blood, public speaking). The therapist needs some type of behavioral assessment to record the continuing progress of a client undergoing an exposure-based treatment for phobia. The simplest possible assessment approach for this is the BAT. The BAT approach is predicted on the reasonable assumption that the client’s fear is the main determinant of behavior in the testing situation. BAT can be conducted visual, virtually, or physically, depending on the clients’ maladaptive behavior. Its application is not limited to phobias, it is applied to various disorders such as Post-Traumatic Stress Disorder (PTSD) and Obsessive-Compulsive Disorder (OCD).

**Assessment** - Behavior therapists complete a functional analysis or a functional assessment that looks at four important areas: stimulus, organism, response and consequences. The stimulus is the condition or environmental trigger that causes behavior. An organism involves the internal responses of a person, like physiological responses, emotions and cognition. A response is the behavior that a person exhibits and the consequences are the result of the behavior. These four things are incorporated into an assessment done by the behavior therapist.

Most behavior therapists use objective assessment methods like structured interviews, objective psychological tests or different behavioral rating forms. These types of assessments are used so that the behavior therapist can determine exactly what a client's problem may be and establish a baseline for any maladaptive responses that the client may have. By having this baseline, as therapy continues this same measure can be used to check a client’s progress, which can help determine if the therapy is working. Behavior therapists do not typically ask the why questions but tend to be more focused on the how, when, where and what questions. Traditional tests like the Rorschach inkblot test or personality tests like the MMPI(Minnesota Multiphasic Personality Inventory) are traditionally used for behavioral assessment because they are based on the personality trait theory where it assumes that a person’s answer to these methods can predict behavior. Behavior assessment is more focused on the observations of a person’s behavior in their natural environment.
Behavioral Assessment specifically attempts to find out what the environmental and self-imposed variables are. These variables are the things that are allowing a person to maintain their maladaptive feelings, thoughts and behaviors. In a behavioral assessment “person variables” are also considered. These person variables come from a person’s social learning history and they affect the way in which the environment affects that person’s behavior. An example of a person variable would be behavioral competence. Behavioral competence looks at whether a person has the appropriate skills and behaviors that are necessary when performing a specific response to a certain situation or stimuli.

When making a behavioral assessment the behavior therapist wants to answer two questions: (1) what are the different factors (environmental or psychological) that are maintaining the maladaptive behavior and (2) what type of behavior therapy or technique that can help the individual improve most effectively. The first question involves looking at all aspects of a person, which can be summed up by the acronym BASIC ID. This acronym stands for behavior, affective responses, sensory reactions, imagery, cognitive processes, interpersonal relationships and drug use.

### 6.3. Basic Principles

First, the two basic principles that contribute to behavioral therapy are classical and operant conditioning.

- **Classical conditioning** involves forming associations between stimuli.
- **Operant conditioning** focuses on how reinforcement and punishment can be utilized to either increase or decrease the frequency of a behavior.

Classical conditioning is one way to alter behavior, and a number of techniques exist that can produce such change. Originally known as behavior modification, this type of therapy is often referred to today as applied behavior analysis. Some of the techniques and strategies used in this approach to therapy include:

  **Flooding:** This process involves exposing people to fear-invoking objects or situations intensely and rapidly. It is often used to treat phobias, anxiety, and other stress-related disorders. During the process, the individual is prevented from escaping or avoiding the situation.
For example, flooding might be used to help a client who is suffering from an intense fear of dogs. At first, the client might be exposed to a small friendly dog for an extended period of time during which he or she cannot leave. After repeated exposures to the dog during which nothing bad happens, the fear response begins to fade.

**Systematic Desensitization:** This technique involves having a client make a list of fears and then teaching the individual to relax while concentrating on these fears. The use of this process began with psychologist John B. Watson and his famous Little Albert experiment in which he conditioned a young child to fear a white rat. Later, Mary Cover Jones replicated Watson's results and utilized counterconditioning techniques to desensitize and eliminate the fear response.

Systematic desensitization is often used to treat phobias. The process follows three basic steps. First, the client is taught relaxation techniques. Next, the individual creates a ranked list of fear-invoking situations. Starting with the least fear-inducing item and working their way up to the most fear-inducing item, the client confronts these fears under the guidance of the therapist while maintaining a relaxed state. For example, an individual with a fear of the dark might start by looking at an image of a dark room before moving on to thinking about being in a dark room and then actually confronting his fear by sitting in a dark room. By pairing the old fear-producing stimulus with the newly learned relaxation behavior, the phobic response can be reduced or even eliminated.

**Aversion Therapy:** This process involves pairing an undesirable behavior with an aversive stimulus in the hope that the unwanted behavior will eventually be reduced. For example, someone suffering from alcoholism might utilize a drug known as disulfiram, which causes severe symptoms such as headaches, nausea, anxiety, and vomiting when combined with alcohol. Because the person becomes extremely ill when they drink, the drinking behavior may be eliminated.

Alternately, many behavior techniques rely on the principles of operant conditioning, which means that they utilize reinforcement, punishment, shaping, modeling, and related techniques to alter behavior. These methods have the benefit of being highly focused, which means that they can produce fast and effective results. Some of the techniques and strategies used in this approach to behavioral therapy include:
**Token Economies:** This type of behavioral strategy relies on reinforcement to modify behavior. Clients are allowed to earn tokens that can be exchanged for special privileges or desired items. Parents and teachers often use token economies to reinforce good behavior. Kids earn tokens for engaging in preferred behaviors and may even lose tokens for displaying undesirable behaviors. These tokens can then be traded for things such as candy, toys, or extra time playing with a favorite toy.

**Contingency Management:** This approach utilizes a formal written contract between the client and the therapist that outlines the behavior change goals, reinforcements and rewards that will be given, and the penalties for failing to meet the demands of the agreement. These types of agreements aren't just used by therapists – teachers and parents also often use them with students and children in the form of behavior contracts. Contingency contracts can be very effective in producing behavior changes since the rules are spelled out clearly in black-and-white, preventing both parties from backing down on their promises.

**Modeling:** This technique involves learning through observation and modeling the behavior of others. The process is based on Albert Bandura's social learning theory, which emphasizes the social components of the learning process. Rather than relying simply on reinforcement or punishment, modeling allows individuals to learn new skills or acceptable behaviors by watching someone else perform those desired skills. In some cases, the therapist might model the desired behavior. In other instances, watching peers engage in the sought after behaviors can also be helpful.

**Extinction:** Another way to produce behavior change is to stop reinforcing a behavior in order to eliminate the response. Time-outs are a perfect example of the extinction process. During a time-out, a person is removed from a situation that provides reinforcement. For example, a child who starts yelling or striking other children would be removed from the play activity and required to sit quietly in a corner or another room where there are no opportunities for attention and reinforcement. By taking away the attention that the child found rewarding, the unwanted behavior is eventually extinguished.